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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/511,986	02/24/2000	Vernon M. Williams	4208US (99-0316)	6129

7590

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EXAMINER

NADAV, ORI

ART UNIT

PAPER NUMBER

2811

DATE MAILED: 01/07/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No

09/511,986

Applicant(s)

WILLIAMS, VERNON M.

Examiner

ori nadav

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 47-68 and 75-90 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 47-68 and 75-90 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 24 February 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a) because they fail to show a dielectric layer on an active surface of the semiconductor die as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Correction is required.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 47-68 and 75-90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kepchar (4,138,672) for reasons of record (paper 10).

4. Claims 47-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hata (4,891,635) for reasons of record (paper 10).

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5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. References A-C and N are cited as being related to elastomer connectors.

***Response to Arguments***

6. Applicant argues on page 8 that drawings 8-9 depict a dielectric layer 42 on an active surface of the semiconductor die 10.

Although figures 8 and 9 depict a dielectric layer 42 on a surface of semiconductor die 10, figures 8 and 9 do not depict and do not number an active region.

7. Applicant argues on pages 8-9 that Kepchar does not teach that land 12 and pad 20 form a single conductive element.

In response to applicant's argument that Kepchar does not teach that land 12 and pad 20 form a single conductive element, it is noted that these features are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

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8. Applicant argues on pages 9-12 that Kepchar does not teach a conductive trace. A conductive trace is a 'conductor'. Kepchar teaches conductors 20, 22 and 26, as claimed.

9. Applicant argues on page 10 that Kepchar does not teach that pads 20 and 22 are not formed on circuit board 10.

Figure 1 of Kepchar clearly depicts conductors 20 and 22 formed on circuit board 10.

10. Applicant argues on page 13 that Kepchar does not teach a plurality of superimposed, contiguous, mutually adhered layers and a contact pad.

Conductive element 26 is superimposed, contiguous and mutually adhered to conductive element 22, thus rendering them a plurality of superimposed, contiguous, mutually adhered layers. The portion of conductive element 26 which is located above die 18 is connected to semiconductor die 18. Therefore, that portion of conductive element 26 can very well be categorized as a contact pad. The broad recitation of the claim does not preclude the conductive element and the contact pad from being a continuous layer.

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11. Applicant argues on page 15 that Hata does not teach a conductive trace formed on a semiconductor device component.

Although figures 1-2 of Hata do not depict a conductive trace formed on a semiconductor device component, Hata recites in column 4, lines 47-50 a conductive trace formed on a semiconductor device component. Therefore, Hata teaches a conductive trace formed on a semiconductor device component, as claimed.

12. Applicant argues on page 15-18 that Hata does not teach a plurality of superimposed, contiguous, mutually adhered layers, because conductive layers 23 and 33 are separated by a thin dielectric film 31.

Conductive layers 23 and 33 were not recited as a plurality of superimposed, contiguous, mutually adhered layers. Conductive layers 52 and 53 were recited as a plurality of superimposed, contiguous, mutually adhered layers.

13. Applicant argues on page 18 that conductive layers 52 and 53 of Hata are secured to one another by compressive forced not mutual adhesion.

Mutually adhered layers are layers binded to one another AS IF by a glue. Therefore, conductive layers 52 and 53 are mutually adhered, as claimed.

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***Conclusion***

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


**Papers related to this application may be submitted to Technology center (TC) 2800 by facsimile transmission. Papers should be faxed to TC 2800 via the TC 2800 Fax center located in Crystal Plaza 4, room 4-C23. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG**

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**30 (November 15, 1989). The Group 2811 Fax Center number is (703) 308-7722 and 308-7724. The Group 2811 Fax Center is to be used only for papers related to Group 2811 applications.**

Any inquiry concerning this communication or any earlier communication from the Examiner should be directed to *Examiner Nadav* whose telephone number is **(703) 308-8138**. The Examiner is in the Office generally between the hours of 7 AM to 3 PM (Eastern Standard Time) Monday through Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Thomas, can be reached at **(703) 308-2772**.

Any inquiry of a general nature or relating to the status of this application should be directed to the **Technology Center Receptionists** whose telephone number is **308-0956**

  
TOM THOMAS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800

Ori Nadav

January 2, 2002